

AMENDMENTS TO THE DRAWINGS

Please replace the sole sheet of drawings by the replacement sheet which is submitted with this paper. The replacement sheet is identical to the original sheet of drawings except that reference numeral 12 that identifies the balancing weight has been added on Fig. 2. The amendment does not add any new matter.

REMARKS

By the present amendment, a replacement sheet of drawings with amended Fig. 2 showing reference numeral 12 that identifies the balancing weight has been added.

Further, the claims have been amended to eliminate the multiple dependencies, and the expression in claim 16 “curing the resin coating the combination of the clip and the balancing weight” has been changed “curing the resin coating applied to surfaces of the clip and balance weight.”

Also, claim 1 has been amended to specify that the protective layer comprises (i) flakes containing zinc and (ii) a binder, and claim 16 has been amended to specify that the resin is charged with flakes containing zinc. Support for this recitation is found in the original application, for example, on page 7, line 19.

Claim 7 has been amended to recite that the binder is an epoxy resin. Support for this recitation is found in the original application, for example, page 5, line 35.

Claim 8 has been amended to recite that the flakes contain essentially zinc. Support for this recitation is found in the original application, for example, original claim 8.

Claim 9 has been cancelled.

Claim 10 has been amended to recite that the binder is a polymerized organic binder. Support for this recitation is found in the original application, for example, on page 8, line 7.

Claim 11 has been amended to recite that the protective coating comprises two or more layers each comprising (i) flakes containing zinc and (ii) a binder. Support for this recitation is found in the original application, for example, original claim 11 and page 6, lines 13-17.

Claim 16 has also been amended to replace “coating the combination” by “applied to surfaces” to improve legibility.

New claims 20-21 depend on claims 16 and 18, respectively, and recite that the resin is an organic binder containing zinc flakes.

New claims 22-23 correspond to claims 3-4 but depend directly or indirectly on claim 2.

New claim 24 corresponds to claim 11 but depends on claim 10.

New claim 25 corresponds to claims 10 and 11 but depends on claim 1.

Claims 1-8 and 10-24 are pending in the present application. Claims 1 and 16 are the only independent claims.

In the Office Action, the drawings are objected to as not showing reference numeral 12.

A replacement sheet of drawings with amended Fig. 2 showing the reference numeral 12 that identifies the balancing weight. Accordingly, it is submitted that the objection should be withdrawn.

Next, in the Office Action, claims 5-15 and 19 are objected to as being incorrect multiple dependent claims, and claim 16 is objected to as lacking legibility.

The claims have been amended to eliminate the multiple dependencies, and the expression in claim 16 “curing the resin coating the combination of the clip and the balancing weight” has been changed “curing the resin coating applied to surfaces of the clip and balance weight” as suggested in the Office Action (except that “the surfaces” has been changed to “surfaces” and “balance weight” has been changed to “balancing weight” for antecedent basis purposes). Accordingly, it is submitted that the objections should be withdrawn.

Next, in the Office Action, claims 1-4 are rejected under 35 U.S.C. 102(b) as anticipated by US 2004/0007912A1 to Amyot et al. ("Amyot").

Further, claims 16-18 are rejected under 35 U.S.C. 103(a) as obvious over Amyot in view of JP03272347 to Nagashima ("Nagashima").

It is alleged in the Office Action that Amyot teaches the main structural features of the present invention, and with respect to the method claims, it is alleged that Nagashima teaches applying multiple resin coatings to the combination of the clip and balance weight, and that dipping and pigment addition are well-known techniques.

Reconsideration and withdrawal of the rejections is respectfully requested. Amyot discloses blancing weights made with zinc alloys including Zamak 3 and 5 (see Amyot at para. 0015). However, Amyot only discloses protecting against corrosion with a paint rich in metallic powders such as zinc, aluminum, or other metals (see Amyot at para. 0020).

In contrast, in the presently claimed invention, flakes containing zinc in a resin or binder are used, as recited in present claims 1 and 16. An advantage of this feature is that it becomes possible to considerably improve the properties of the coating, and in particular its corrosion-resistance properties, as disclosed and illustrated in the present specification, for example on page 8, first full paragraph.

The improvement of the anti-corrosion properties when using flakes containing zinc in a resin or binder, as compared to a paint with metallic powder of Amyot, for example, can be related at least in some cases to the fact that the flake shape increases the travel path for ions (in

particular Cl⁻ ions) to reach the metal of the balancing weight, especially as a result of the flakes becoming oriented during application of the coating layers.

Thus, the features of the presently claimed invention and its advantages are not taught or suggested in Amyot, which is completely silent regarding using flakes containing zinc in its coating. Further, Nagashima fails to remedy this deficiency of Amyot. Therefore, the present claims are not anticipated by Amyot, and not obvious over Amyot taken alone or in any combination with Nagashima.

In addition, with respect to the dependent claims, it is submitted that Amyot fails to teach or suggest the combined features of each of these respective claims, and that Nagashima fails to remedy these deficiencies of Amyot.

In particular, with respect to claims 10, 20-21 and 24-25, it is submitted that Amyot is completely silent as to the benefits of using an organic resin or binder for its coating. In contrast, the present inventors have determined that using an organic resin or binder, as recited in each of these claims, makes it possible to improve adhesion, in particular in a method of coating the weights including dipping and curing, as recited in present claim 16. These features of the presently claimed invention and their advantages are not taught or suggested in Amyot, and Nagashima fails to remedy the deficiencies of Amyot. Therefore, each of present claims 10 and 20-21 is not anticipated by Amyot and not obvious over Amyot taken alone or in any combination with Nagashima.

Also, with respect to claims 11, 18, 21 and 24-25, it is submitted that Amyot is completely silent as to a second layer or bath for coating the balancing weights. In contrast, the

present inventors have determined that using two or more layers makes it possible to improve the orientation of the flakes containing zinc so as to further improve the resistance to corrosion due to the use of flakes in the resin of binder. These features of the presently claimed invention and their advantages are not taught or suggest in Amyot, and Nagashima fails to remedy the deficiencies of Amyot. More specifically, contrary to the interpretation in the Office Action, the person of ordinary skill in the art would have had no motivation to refer to Nagashima regarding a number of coating layers, and would have had no motivation to increase a number of coating layers because of expected costs and manufacturing complexity involved, in the absence of expected improvements in corrosion resistance. Therefore, each of claims 11 and 18 and 21 is not anticipated by Amyot and not obvious over Amyot taken alone or in any combination with Nagashima.

In view of the above, it is submitted that the rejections should be withdrawn.

In conclusion, the invention as presently claimed is patentable. It is believed that the claims are in allowable condition and a notice to that effect is earnestly requested.

In the event there is, in the Examiner's opinion, any outstanding issue and such issue may be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Amendment
US Appl. No. 10/527,184
Attorney Docket No. PSA05005

In the event this paper is not considered to be timely filed, the Applicants hereby petition for an appropriate extension of the response period. Please charge the fee for such extension and any other fees which may be required to our Deposit Account No. 502759.

Respectfully submitted,

/nicolas seckel/

Nicolas E. Seckel
Attorney for Applicants
Registration No. 44,373

Nicolas E. Seckel
Patent Attorney
1250 Connecticut Avenue NW Suite 700
Washington, DC 20036
Tel: (202) 669-5169
Fax: (202) 822-1257
Customer No.: 29980
NES/rep